

**FINDING OF NO SIGNIFICANT IMPACT (FONSI)**  
**TENNESSEE VALLEY AUTHORITY**  
**LAND USE AND SECTION 26a APPROVAL FOR FIVE STREAM**  
**CROSSINGS ASSOCIATED WITH IMPROVEMENTS TO US 25 (STATE**  
**ROUTE 32) FROM SOUTH OF LITTLE SYCAMORE CREEK TO NORTH**  
**OF INDIAN CREEK, NORRIS RESERVOIR,**  
**GRAINGER COUNTY, TENNESSEE**  
**TENNESSEE DEPARTMENT OF TRANSPORTATION**

**Proposed Action**

Tennessee Valley Authority (TVA) proposes to approve Section 26a applications for stream crossings, channel relocations, and permanent fill associated with improvements to US 25 (State Route 32) from south of Little Sycamore Creek to south of State Route (SR) 33 near Tazewell. On June 3, 2002, TVA received a 26a application from the Tennessee Department of Transportation (TDOT) in regard to the referenced project. This project is part of Corridor "S" in the Appalachian System and is designated as Sections 1 and 2 in the Federal Highway Administration (FHWA) Environmental Assessment (EA) and FONSI dated September 18, 1995. Sections 1 and 2 include the improvement of SR 32 (US 25E) from south of Little Sycamore Creek to north of Indian Creek located in Grainger County, Tennessee. TVA Section 26a approvals are needed for the following locations and proposed actions associated with Sections 1 and 2 of US 25E widening:

- Sta. 1+040: Caney Creek.
- Sta. 1+090.026: Unnamed tributary to Clinch River.
- Sta. 1+099 to Sta. 1+142: Unnamed tributary to Clinch River.
- Sta. 1+845.768: Unnamed tributary to Clinch River.
- Sta. 3+616 to Sta. 3+695: Unnamed tributary to Clinch River.
- Sta. 3+614 to Sta. 4+020: Unnamed tributary to Clinch River.
- Sta. 4+413 to Sta. 5-184: Unnamed tributary to Big Sycamore Creek.
- Sta. 5+319: Caney Creek.
- Sta. 5+430: Caney Creek.
- Sta. 6+060: Caney Creek.
- Sta. 7+070 to Sta. 7+785: Unnamed tributary to Caney Creek.
- Sta. 7+632 to Sta. 8+481: Wetland and Caney Creek.
- Sta. 8+875: Unnamed tributary to Big Sycamore Creek.
- Sta. 8+881 to Sta. 9+100: Unnamed tributary to Big Sycamore Creek.
- Sta. 9+734 to Sta. 9+863: Unnamed tributary to Big Sycamore Creek.
- Sta. 9+842 to Sta. 10+025: Unnamed tributary to Big Sycamore Creek.

In addition, a permanent easement for use of 12.7 acres of TVA land on Norris Reservoir would be needed.

**Alternatives**

TVA and U.S. Army Corps of Engineers (USACE) considered the no action and action alternatives, along with appropriate mitigation.

## **Impacts Assessment**

On August 18, 1998, TVA adopted the previous reviews for this project: an EA and FONSI dated September 18, 1995, conducted by the FHWA; and an EA and FONSI dated September 2, 1997, conducted by the United States Army Corps of Engineers (USACE). The adoption of these previous reviews was done in support of TVA's decision to provide Section 26a approval for Sections 4-6. The analysis of the build alternatives for the entire project concluded that impacts to land use, farmland, socioeconomics, air quality, noise, aesthetics, and floodplains were insignificant. TVA determined that with the implementation of commitments resulting from the reviews of the U.S. Fish and Wildlife Service (USFWS), FHWA, USACE, and Tennessee Department of Environment and Conservation (TDEC), all impacts associated with Sections 4, 5, and 6 would be reduced to insignificant levels. TVA's decision relating to Section 3 of the project, were based on a Supplemental EA and FONSI issued in January 2002. This Supplemental EA and FONSI relates to TVA's actions (Section 26a approval and easement approval) for Sections 1 and 2. The Supplemental EA evaluated impacts to threatened and endangered species, streams, wetlands, cultural resources, floodplains, recreation, and visual impacts, finding these impacts to be insignificant. Additionally, TVA has reviewed the 401 Water Quality Certification for Sections 1 and 2 and believes that the conditions of these approvals would ensure that impacts to water quality, streams, and wetlands would be insignificant.

## **TVA Review and Mitigation**

TVA has independently reviewed the proposed actions for Sections 1 and 2 of the project. TVA reviewed the accuracy, scope, and content of the FHWA EA and FONSI dated September 18, 1995, as it applies to Sections 1 and 2 of the project. TVA has reviewed the TDOT documentation for Section 106 compliance and has determined that adequate Section 106 compliance has been achieved for this project. Subsequent construction of this section would not result in adverse impact to any significant historic property. TVA has concluded that the construction of Sections 1 and 2 would have no adverse effect on historic properties. By letter of December 12, 2003, the Tennessee Historical Commission determined that there are no National Register of Historic Places listed or eligible properties affected by these sections. The project would comply with the requirements of the National Flood Insurance Program (NFIP) and be consistent with Executive Order 11988. TVA reviewed the TDEC Section 401 Water Quality Certification and found that it addressed the stream and wetland impacts of the proposed actions for Sections 1 and 2 of the project. Subsequently, more detailed plans by TDOT include a modified alignment which provides more beneficial effects than previously assessed by TDEC. TDOT has revised their initial 401 Water Quality Certification application with TDEC. With this new alignment, TVA believes that the general provisions and the use of the in-lieu fee program for 1,652 feet of culverting, 230 feet of riprap, and 579 feet of riparian canopy losses are adequate mitigation for the potential impacts to streams and aquatic habitat. TVA concurs that the proposed mitigation for the permanent loss of 4.92 wetland impacts by debiting 9084 acres (2:1 ratio) from credits available to TDOT at the Shady Valley Wetland Mitigation Bank are adequate. Temporary wetland impacts (2.19 acres) would be mitigated by returning these areas to their original elevations and replanting.

TVA's Section 26a approval is contingent upon successful implementation of Best Management Practices for erosion and sediment control including the TVA Standard Conditions 5a through 5e for culverts and Conditions 6a through 6i for construction. To mitigate the potential loss of the two public boat ramps on park lands, TDOT will improve the Big Sycamore Creek ramp by replacing the existing ramp in the same location with a 15-meter-wide concrete ramp and pave the access road and parking area. TDOT will improve the access to Clinch River ramp by paving the access road and adjacent parking.

TVA approval is also contingent upon TDOT adhering to the reasonable and prudent measures identified by the USFWS in their May 2002 addendum to the May 1993 biological opinion. The

following reasonable and prudent measures are to greatly reduce the likelihood of adversely affecting aquatic species in the project area:

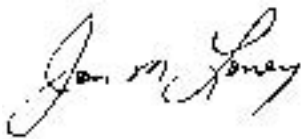
1. Clearing and grubbing will be limited to the minimum amount necessary to accommodate roadway cut and fill slopes and operation of equipment. All disturbed areas will be stabilized, seeded, and mulched as soon as practicable to reduce the potential for soil erosion.
2. Canopy removal along area streams, including the Clinch River, will be kept to an absolute minimum.
3. Silt fence will be installed along the toe of all fills and along all streambanks to minimize the potential of entering the streams. Staked hay bales will be used in conjunction with silt fences. A minimum 10-foot vegetated buffer or "green belt" will be left between silt fences and the stream edges.
4. Erosion and sediment control measures will be installed concurrent with clearing and grubbing activities, but should be functional prior to earthmoving activities. These may include, but are not limited to, silt fence, hay bales, clean shot rock checkdams, sandbags, sediment ponds, sediment filter bags, slope drains, or other suitable methods.
5. Erosion control structures will be inspected regularly and maintained throughout the life of the project so that they are not rendered ineffective. Sediment is to be removed from structures as necessary and must be removed when design capacity has been reduced by 50% to insure maximum effectiveness. Material from these structures is not to be disposed of in the Clinch River or any other area streams.
6. Maintenance needs for erosion and sediment control structures identified during inspections or by other means shall be accomplished before the next storm event if possible, but in no case more than 7 days after the need is identified. If maintenance prior to the next anticipated storm event is impracticable, maintenance must be scheduled and accomplished as soon as practicable.
7. Waste and borrow areas will be located in non-wetland areas and are to be of sufficient distance from area streams such that no soil material is allowed to enter these streams. These areas will be stabilized as soon as practicable. Appropriate erosion and sediment control measures will be utilized in these areas to minimize soil loss.
8. Stockpiled topsoil or fill material is to be treated in such a manner that is not allowed to enter either the Clinch River or any other area streams.
9. Equipment staging areas will be located a sufficient distance from area streams and/or wetlands such that no oils, coolants, or other petroleum products are allowed to enter these areas.
10. Construction of the proposed bridge over the Clinch River will be accomplished "in the dry" using cofferdams or other similar means to separate construction activities from flowing waters. All water from cofferdams is to be pumped into filter bags or sediment ponds prior to release back into the Clinch River.
11. The proposed bridge piers located in the Clinch River will be designed and constructed to minimize impedance of river flows.
12. Demolition and removal of the old bridge will be accomplished in such a way to minimize the amount of debris that is allowed to enter the Clinch River. Debris from the old bridge shall not be disposed of in the Clinch River. Any material that enters the Clinch River during the demolition process will be removed as completely as practicable and with as little disturbance to the river substrate as possible.

13. Drainage structures required at stream crossings will be constructed "in the dry." Stream flows will be diverted through work areas using flexible pipes or berms or channels lined with plastic, clean shot rock, or other non-erodible material.
14. No motorized equipment will be operated in the Clinch River during construction of the proposed bridges except on temporary pads or haul roads constructed of clean shot rock. Equipment required for core-drilling of the proposed pier footings by the TDOT Geo-Technical Section will be exempted from this condition. All material from the pads and/or haul roads will be removed to the approximate elevation of the existing substrate once the work on the proposed bridge is completed.
15. Any motorized equipment operating from the banks of the Clinch River will be accomplished on gravel or clean shot rock pads. This material is to be removed and the banks reshaped to their approximate pre-construction condition prior to project termination.
16. No fill material for rock pads or haul roads will be obtained from the Clinch River. No alteration or realignment of the Clinch River channel will be permitted.
17. Prior to any work on the proposed structure over the Clinch River, a mussel sweep will be conducted to remove as many mussels as practicable from the footprints of the proposed pier footings. Any mussels collected would be relocated to suitable habitat upstream of the project area. A similar sweep will be conducted in the corridor of the existing bridge prior to its removal.
18. A Stormwater Pollution Prevention Plan (SWPP) will be prepared for the proposed project and will contain a detailed erosion and sediment control plan.
19. Weekly stormwater inspections will be conducted for the proposed project as per National Pollutant Discharge Elimination System (NPDES) guidelines. Inspections will be performed by either TDOT personnel or a designated erosion control consultant throughout the duration of the project. Stormwater inspection reports will be submitted to the Tennessee Department of Environment and Conservation (TDEC) on a quarterly basis. A TDOT inspector will be on-site daily.

### **Conclusion and Findings**

For compliance with Executive Order 11988, culverts, bridges, the grading, and fill associated with bridge approach are considered to be repetitive actions in the floodplain for which there is no practicable alternative. For compliance with Section 106, TVA has determined that there are no National Register of Historic Places listed or eligible properties affected by these sections.

Based on the FHWA EA, the TDEC Section 401 Water Quality Certification, TVA's previous FONSI, and further review, we conclude that the proposed action would not be a major federal action significantly affecting the environment. Accordingly, an Environmental Impact Statement is not required. This FONSI is contingent upon successful implementation of the mitigation measures described before.



*February 13, 2004*

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Date Signed